DOCUMENT RESUME

ED 351 181 RC 018 863

AUTHOR Fenwick, Carolyn; Huang, Zheng Sen

TITLE Results of the Primary Assessment Program for 1990 in

Urban and Aboriginal Schools. Research and Evaluation

Reports. Report 3/1991.

INSTITUTION Northern Territory Dept. of Education, Darwin

(Australia).

REPORT NO ISBN-0-7245-2577-7

PUB DATE 91

NOTE 59p.; Report presented at the Meeting of the Rural

Education Research Association (Alice Springs,

Northern Territory, Australia, February, 1992). For a

related report, see RC 018 860.

PUB TYPE Reports - Evaluative/Feasibility (142) --

Speeches/Conference Papers (150)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS Academic Achievement; Achievement Tests; *Educational

Testing; Elementary Secondary Education; Foreign Countries; Indigenous Populations; *Mathematics

Achievement; *Program Evaluation; *Reading

Achievement; Rural Education; Student Evaluation;

*Test Results

IDENTIFIERS Aboriginal People; *Aboriginal Schools (Australia);

*Australia (Northern Territory)

ABSTRACT

This report gives the 1990 results of the Primary Assessment Program (PAP). The program monitors achievement in reading and mathematics in urban and Aboriginal schools in the Northern Territory (Australia). It provides feedback to schools on the performance of their students in basic skills and provides indicators of performance for public reporting. Since 1986 tests have been administered in reading, writing, and mathematics for urban and Aboriginal schools annually. The target groups were students at grade 5 and 7 in urban schools and grades 5 to post-primary in Aboriginal schools, and students of secondary-aged Community Education Centres. The following results were generated by the study: (1) grade 5 students in urban schools found the mathematics test relatively easy, with 38% of all questions falling in the easy category compared to 25% in the very difficult category; (2) grade 7 students in urban schools found the mathematics test relatively difficult, 17% of all questions were in the easy category compared to 32% in the very difficult category; (3) results of the mathematics questions for students in Aboriginal schools were well distributed in three categories of difficulty; (4) students in grades 5 and 7 in urban schools did not find the reading tests difficult; and (5) Aboriginal students found the reading tests to be moderately difficult. This report provides tables and graphs presenting the percentage of correct answers for each test item, distribution of test scores, and means for subtests. Appendices include sample test items used in PAP. (LP)

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this docu-ment do not nacessarily represent official OERI position or policy

CURRICULUM AND ASSESSMENT DIVISION

Research and Evaluation Reports

Report 3/1991

Results of the Primary Assessment Program for 1990 in Urban and Aboriginal Schools

NORTHERN TERRITORY DEPARTMENT OF EDUCATION
DARWIN 1991



ISBN 0 7245 2577 7

For further information please contact: Curriculum & Assessment Division GPO Box 4821 Darwin NT 0801 Telephone: (089) 89 5611

Printed by the Educational Resources Unit Northern Territory Department of Education P&P91/807-500

Project Team Writers: Dr Carolyn Fenwick and Huang Zheng Sen (Project Leader) Evaluation, Research and Accreditation Section

Results of the Primary Assessment Program for 1990 in urban and aboriginal schools / (project team: Carolyn Fenwick and Huang Zheng Sen). Darwin, N.T.: Northern Territory Dept. of Education, 1991.

v, 66 p.: ill., map; 30 cm. (Research and evaluation report; 3/1991.)

ISBN 0724525777 : C.I.P.

1. Education, Primary — Northern Territory — Evaluation. 2. Educational evaluation — Northern Territory. 3. Aborigines, Australian — Education — Northern Territory. I. Fenwick, Carolyn. II. Huang, Zheng Sen. III. Northern Territory. Curriculum and Assessment Division. IV. Series: Research and evaluation report (Northern Territory. Curriculum and Assessment Division); 3/1991.

372.126/099429 20



FOREWORD

I commend this report to all readers and particularly those in schools. The aim in developing the Primary Assessment Program is to satisfy two basic objectives: the provision of assessment which schools will find useful and the collection of data from which to make some evaluation of our efforts in some of the fundamental areas of education in the Northern Territory.

The Primary Assessment Program is an integral part of the assessment strategy employed in the Northern Territory. The program is overseen by the Primary Assessment Committee of the Board of Studies. Changes to the Primary Assessment Program are continually being made in response to recommendations and suggestions received from principals and teachers. The bank of tests being accumulated over the years constitutes a valuable resource for teachers.

Teachers are involved at all levels in the program and inservices were recently held in various centres. It was evident that teachers found the tests useful not only as a way of evaluating their own work, but also as diagnostic tools to help their students. Close involvement of teachers means that the tests are relevant to the implemented curriculum, that they reinforce the objectives of the curriculum and that teachers involved benefit from the strong professional development in working with the program.

The program has won wide acceptance and recognition in NT schools in recent years. It has been very pleasing to see the way in which some schools have made the Primary Assessment Program integral to their teaching program and are exploiting it to the full.

Dr C H Payne Chairman

NT Board of Studies

5



CONTENTS

FOREWORD	iii
INTRODUCTION	1
AIMS OF THE PROGRAM	-1
THE TESTS	
MATHEMATICS - INTRODUCTION	4
MATHEMATICS RESULTS: YEAR 5	5
SUMMARY	5
PERCENTAGE CORRECT ON ITEMS	5
DISTRIBUTION OF TEST SCORES	5
MEANS FOR SUBTESTS COMPARISON	6 7
MATHEMATICS RESULTS: YEAR 7	8
SUMMARY	8
PERCENTAGE CORRECT ON ITEMS	8
DISTRIBUTION OF TEST SCORES	8
MEANS FOR SUBTESTS	9
COMPARISON	10
MATHEMATICS RESULTS: ABORIGINAL SCHOOLS SUMMARY	- 11 - 11
PERCENTAGE CORRECT ON EACH ITEM	11
DISTRIBUTION OF TEST SCORES	11
MEANS FOR SUBTESTS	12
READING - INTRODUCTION	13
READING RESULTS: YEAR 5	14
SUMMARY DEDCEMENT OF CORDECT ON EACH MEEN	14
PERCENTAGE CORRECT ON EACH ITEM DISTRIBUTION OF TEST SCORES	14 15
MEANS FOR SUBTESTS	16
COMPARISON	17
READING RESULTS: YEAR 7	18
SUMMARY	18
PERCENTAGE CORRECT ON EACH ITEM	18
DISTRIBUTION OF TEST SCORES MEANS FOR SUBTESTS	19 20
COMi'ARISON	20
READING RESULTS: ABORIGINAL SCHOOLS	22
SUMMARY	22
PERCENTAGE CORRECT ON EACH ITEM	22
DISTRIBUTION OF TEST SCORES	23
MEANS FOR SUBTESTS	25
SUMMARY AND CONCLUSION	26
APPENDIXES	
I - NT BOARD OF STUDIES - Primary Assessment Committee (1990)	31
II - 1990 TEST CONSTRUCTION PANELS	33
III - MATHEMATICS ITEMS - YEAR 5	35
IV - MATHEMATICS ITEMS - YEAR 7	37
V - MATHEMATICS ITEMS - ABORIGINAL SCHOOLS	39
VI - READING URS5C5 - YEAR 5	41
VII- READING URS5C7 - YEAR 5	43
VIII - READING FOR DIFFERENT PURPOSES - YEAR 5	45
IX- READING URS7C3 - YEAR 7	49
X - READING URS7C8 - YEAR 7	52
XI - READING FOR DIFFERENT PURPOSES - YEAR 7	53
XII - READING ABC8 - ABORIGINAL SCHOOLS	57
XIII - READING FOR DIFFERENT PURPOSES ABR7- ABORIGINAL SCHOOLS	5 9



VIX	- READING ABC10 - ABORIGINAL SCHOOLS	63
XV -	READING FOR DIFFERENT PURPOSES ABR 16- ABORIGINAL	
SCH	OOLS	65
BIBLIOGRA	APHY	66
TABLES		
Table 1:	Difficulty of Items: Mathematics Year 5	5
Table 2:	Distribution of Scores: Mathematics Year 5	6
Table 3:	Means on Subtests: Mathematics Year 5	6
Table 4:	Difficulty of Items by Subtest: Mathematics Year 5	6
Table 5:	Comparison Between 1989 and 1991 Performance: Mathematics Year 5	7
Table 6:	Difficulty of Items for Mathematics Year 7	8
Table 7:	Distribution of Scores: Mathematics Year 7	9
Table 8:	Means on Subtests: Mathematics Year 7	9
Table 9:	Difficulty of Items by Subtest: Mathematics Year 7	9
Table 10:	Comparison Between 1988, 1989 and 1990 Performance:	_
	Mathematics Year 7	10
Table 11:	Difficulty of Items: Mathematics Aboriginal Schools	11
Table 12:	Distribution of Scores: Mathematics Aboriginal Schools	12
Table 13:	Means on Subtests: Mathematics Aboriginal Students	12
Table 14:	Difficulty of Items by Subtest: Mathematics Aboriginal Schoole	12
Table 15:	Difficulty of Items: Reading Year 5	14
Table 16:	Distribution of Scores: Reading Year 5	15
Table 17:	Means on Reading: Year 5	16
Table 18:	Comparison Between 1989 and 1990 Performance: Year 5	17
Table 19:	Difficulty of Items: Reading Year 7	18
Table 20:	Distribution of Scores: Reading Year 7	19
Table 21:	Means on Reading: Year 7	.20
Table 22:	Comparison Between 1989 and 1990 Performance: Year 7	21
Table 23:	Difficulty of Items: Reading Aboriginal Schools	22
Table 24:	Distribution of Test Scores: Aboriginal Schools	23
Table 25:	Means on Reading: Aboriginal Schools	25
GRAPHS		
Graph 1:	Distribution of Scores: Mathematics Year 5	·S
Graph 2:	Distribution of Scores: Mathematics Year 7	8
Graph 3:	Distribution of Scores: Mathematics Aboriginal Schools	11
Graph 4:	Distribution of Scores: Reading Year 5 - Test URS5C5	15
Graph 5:	Distribution of Scores: Reading Year 5 - Test - URS5C7	15
Graph 6:	Distribution of Scores: Reading Year 5 - Test - UR5R90	16
Graph 7:	Distribution of Scores: Reading Year 7 - Test URS7C3	· 19
Graph 8:	Distribution of Scores: Reading Year 7 - Test URS7C8	19
Graph 9:	Distribution of Scores: Reading Year 7 - Test UR7R90	20
Graph 10:	Distribution of Test Scores: Aboriginal Schools - Test ABC10	23
Graph 11:	Distribution of Test Scores: Aboriginal Schools - Test ABR7	23
Graph 12:	Distribution of Test Scores: Aboriginal Schools - Test ABC8	24
Graph 13:	Distribution of Test Scores: Aboriginal Schools - Test ABR16	24



INTRODUCTION

The Primary Assessment Program (PAP) monitors achievement in English and Mathematics throughout the Northern Territory each year. It originated in 1982 after the results of NT students in a national testing program (Australian Studies in Student Performance Project) triggered a vigorous public debate on standards. A system-wide testing program on basic skills was introduced in urban schools for Years 5 and 7 in 1983 and in Aboriginal schools in 1986.

Prior to 1988, assessment of achievement in urban schools was based on minimum competencies (core objectives) for reading and mathematics. Since the tests were pitched at relatively low levels with passing scores of 70% correct for reading and 80% correct for mathematics, most urban students 'passed' and did not find them sufficiently challenging: thus they were not taken seriously. Teachers did not find them particularly helpful and except for identifying students in the lowest 20% of the scale, the program appeared to have no useful purpose.

In 1988, the focus of the PAP in urban schools for Year 7 changed to an assessment of achievement in the whole curriculum rather than in core objectives and the following year similar changes were made for Year 5. However, the testing program for Aboriginal schools is still based on minimum competencies expected of students in Year 5. The essential difference between the urban and Aboriginal programs is that the former measures achievement on the total curriculum while the latter measures achievement at stages 3, 4 and 5 of the Northern Territory English core curriculum and stages 3 and 4 of the Western Australian Mathematics syllabus.

AIMS OF THE PROGRAM

The main purpose of the program is to provide feedback to schools on the performance of their students in basic skills and to provide indicators of performance in some aspects of literacy and numeracy across the system. In more specific terms, the aims may be summarised as follows:

- at the classroom level, to provide test results of individual students in reading and mathematics that would assist learning
- at the school level, to provide test data that would allow schools to compare both individual and group i.e. school cohort results with the Territory norms
- at the system level, to provide test data on performance in reading and mathematics across the Territory
- at both the school and system levels, to give indications of areas of strength and weakness in reading and mathematics
- to provide schools with a bank of high quality assessment materials.

THE TESTS

The tests in reading and mathematics for urban and Aboriginal schools are administered annually. The target groups are Year 5 and 7 students in urban schools, and all students in Years 5, 6, 7 and post primary in Aboriginal schools and secondary-aged Community Education Centre students. All students are expected to participate.

Writing is assessed in urban and Aboriginal schools every year by moderation of teacher-assessed sample scripts sent in from schools. Schools are asked to return samples of students' writing from two genres, e.g. argument and explanation, in accordance with procedures



Ö

previously outlined. These are graded by a team of experienced teachers as showing 'high', 'medium' or 'low' competence. The results are published in a booklet which also includes a checklist of 'descriptors' for assessing quality in key aspects of writing and samples of students' work with grades and annotated comments.

Tests for the Aboriginal program are written by teachers and staff with experience of teaching in Aboriginal schools, who produce materials with meaning and relevance for Aboriginal students. Although it is recognised that no achievement test measuring learning can be completely culture-free, great care is taken to remove elements that might seem to be culture-biased.

For generating items, a test specifications chart is used; this provides the mechanism for checking the number of items for each content area and the nature of ability or skill involved. A small proportion of the questions in the mathematics tests measure recall: the majority measure understanding and application of concepts.

Before finalising the tests, the questions are trialled in a sample of schools and subjected to an item analysis to improve their quality. Each question is checked for relevance to the content area; indices of difficulty, discrimination and reliability are calculated, based on traditional test theory. Some items are discarded without further work; many require modification in text and/or graphics. The procedures used in the item analysis are designed to ensure the validity of the tests in terms of their relevance to the syllabus content and classroom instruction, their reliability and their ability to discriminate between able and less able students.

Students' marked answer sheets are returned to the Curriculum and Assessment Division for processing and analysis. Diagnostic information is found for use by both schools and system and an analysis of performance between administrations is undertaken to detect changes and discover trends.

After the program is completed, the test results are reported. Each school receives its own students' and the Territory results, to enable them to make comparisons. Students' answer scripts, which are sent to Curriculum and Assessment for data input and analysis, are returned to the school. All information is confidential and the public report of Territory-wide results does not include details for individual schools.

Three types of statistical reports are generated for the school and the system:

Report No. 1: Percentage Correct on Each Item

This report gives data showing percentages of students answering each question correctly for the school and Territory cohorts respectively. The items are ranked in order of their difficulty for Territory students. The report has been found to be particularly useful in identifying areas of strength and weakness within the cohorts.

Report No. 2: Distribution of Test Scores

This report shows the raw scores and percentages obtained by individual students on each test in a particular school. The distribution of scores for Territory students is also provided for each of the tests. The report enables a student's status in relation to the Territory population to be readily determined on any test.

Report No. 3: Means for Subtests

In this report, the means and standard deviations for subtests are generated for both the school and Territory cohorts, allowing comparisons to be made. The report enables the school and the system to identify specific areas in the curriculum which may need further attention.



An analysis is done to compare performance between administrations. This is carried out by repeating the same tests in reading or using 'link' items in mathematics.

One significant outcome of the program is that information is available about what each question measures and what proportion of Territory students answered it correctly. This is useful when teachers administer the same tests to other students or assemble their own tests from the test collection. In reading and mathematics, information is provided regarding the concept, skill or process each item measures, as well as the level of difficulty.



MATHEMATICS - INTRODUCTION

In urban schools, the mathematics tests were administered in two sections: each section being administered on the same day and completed in forty-five minutes. These were designed to assess achievement in the whole curriculum.

One written and one practical mathematics test were set for Aboriginal schools. These were based on Stages 3 and 4 of the WA Mathematics Syllabus and were intended to measure minimum competencies. The written test was untimed and in two sections, both being completed on the same day. There were six items in the practical test, all of which were attempted with each student during the testing period.

The written mathematics tests for both urban and Aboriginal schools comprised sixty items covering the following strands: space, measurement, number, number relations and statistics/graphs. Within each area, there were questions requiring the recall of basic facts, computation, understanding of various concepts and mathematical ideas and their application in solving problems. The papers included questions in both multiple-choice and open-ended format. The distribution of items in the various areas was decided by the test-writing panel at the time of test construction.

The practical mathematics tasks set in Aboriginal schools included tasks on: measurement, space and number.

Each chapter in this report includes a table showing the number of items for each category of difficulty (Difficulty of Items). The results on individual items are grouped into three categories which are arbitrary, giving some idea of the difficulty of questions. The categories of difficulty are as follows:

- items answered correctly by 65 100% of students were classified as easy
- items answered correctly by 40 64% of students were classified as moderately difficult
- items answered correctly by less than 40% of students were classified as very difficult.

The tests included a wide variety of questions at different levels of acheivement. That some students were unable to answer some of the more difficult questions is to be expected, since part of the function of these tests is to give some indication of the differing levels at which Year 5, Year 7 and Aboriginal students are operating.

A table is also included of the distribution of scores and performance for each score range (Distribution of Scores). For convenience, these are grouped 0-10, 11-20, etc.

A table of the means and standard deviations for subtests and total test is also given. A further table is included showing the difficulty of items within each subtest.

Comparisons were made between the 1989 and 1990 Year 5 results and those of 1988, 1989 and 1990 for Year 7. These were based on link items common to the different tests. Comparisons between earlier years were impossible because the testing program for Year 5 was changed in 1989 and that for Year 7 in 1988.

The analysis used was a t-test between means for correlated data. This test of significance considered data from individual items, using percentage correct values. It is more sensitive than the t-test between means as it uses data from all items. The t-test of significance for correlated means was applied to twelve 'link' items for Year 5 and twelve 'link' items for Year 7. Estimates were made to produce comparisons for three items included in 1988 and 1989, but not in 1990.



MATHEMATICS RESULTS: YEAR 5

SUMMARY

Year 5 students in urban schools found the 1990 mathematics test relatively easy; 38% of all questions fell in the easy category compared to 25% in the very difficult category. Most students found questions on graphs and statistics easy. Questions requiring computational skills fell mostly in the moderately difficult category. However, this might have been because the three number questions in the very difficult category involved translating a written statement into numerical terms and therefore might be more a reflection of reading difficulties than a mathematical deficiency. Selected questions from the paper are included in Appendix III.

PERCENTAGE CORRECT ON ITEMS

Table 1: Difficulty of Items: Mathematics Year 5

% ANSWERED CORRECTLY	DIFFICULTY	NUMBER OF ITEMS
65 - 100%	Easy	. 23
40 - 64%	Moderately difficult	22
< 40%	Very difficult	15

A total of 1919 students took the test. Table 1 shows the number of items in each category of difficulty. There were fewer items in the very difficult category than in either the easy or moderately difficult categories. Students experienced least difficulty with question 16, with 86.29% of all students answering correctly compared to only 11% responding correctly to question 24. 52.53% of students answered question 53 correctly. These three items are reproduced in Appendix III.

DISTRIBUTION OF TEST SCORES

Graph 1: Distribution of Scores: Mathematics Year 5

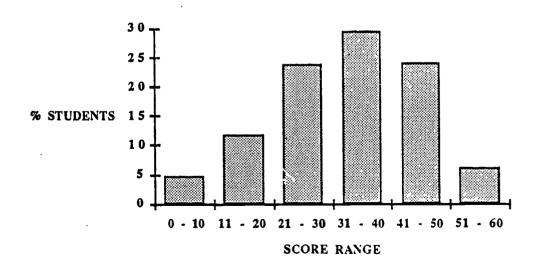




Table 2: Distribution of Scores: Mathematics Year 5

SCORE RANGE	NUMBER OF STUDENTS	PERCENTAGE OF STUDENTS
0 - 10	90	4.69
11 - 20	225	11.73
21 - 30	457	23.81
31 - 40	566	29.49
41 - 50	464	24.18
51 - 60	117	6.10
Total	1919	100.00

As shown in Table 2, 4.69% of students scored less than 10, while 6.10% obtained scores in the range 51 to 60. The largest group of students, 566, attained scores between 31 and 40, with a score of 34 being achieved by more students (67) than any other score. 40.23% of all students obtained scores in the range 0 to 30, while 59.77% answered more than 30 items correctly. The highest score was 60 (2 students) and the lowest score was 0 (7 students). The results appear to approach a normal distribution, as shown in Graph 1.

MEANS FOR SUBTESTS

Table 3: Means on Subtests: Mathematics Year 5

SUBTEST	NUMBER OF ITEMS	MEANS	STANDARD DEVIATIONS
Number	14	7.14	3.67
Number relations	18	10.21	3.91
Measurement	15	7.0 7	3.21
Space	• 10	6.27	2.30
Graphs/Statistics	. 3	2.31	0.85
Total Test	60	33.00	12.24

Individual scores varied considerably, as is evidenced by the size of the standard deviations for the various subtests and the total test.

Table 4: Difficulty of Items by Subtest: Mathematics Year 5

SUBTEST	Easy	NUMBER OF Moderate	ITEMS Very difficult	Total
Number	4	7	3	14
Number relations	8	6	4	18
Measurement	4	5	6	15
Space	4	4	2	10
Graphs/Statistics	3	0	0	3
Total Test	23	22	. 15	60

No student had any difficulty in answering questions on graphs and statistics. Questions on number relations were not overly hard while those relating to measurement, most especially those on time and mass were found to be most difficult. The three most difficult questions on number involved the translation of word problems into numerical tasks.

COMPARISON

Table 5: Comparison Between 1989 and 1990 Performance: Mathematics Year 5

ITEM NO.	PROPORTIO	N CORRECT
(as in 1990)	1989	1990
6	0.37	0.42
14	0.05	0.14
27	0.77	0.79
28	0.20	0.18
35	0.70	0.66
37	0.37	0.37
40	0.74	0.81
43	0.41	0.41
· 44	0.56	0.64
45	0.54	0.49
46	0.66	0.69
56	0.25	0.25
59	0.20	0.21
MEAN	0.46	0.48
STD DEVIATION	0.24	0.24
NO. STUDENTS	1865	1919
CORRELATION	0. 98	

Table 5 shows the results on the link items for 1989 and 1990. A t-test between means for correlated data on the link items shows a small improvement in performance in 1990 compared with 1989.





MATHEMATICS RESULTS: YEAR 7

SUMMARY

Year 7 students in urban schools found the 1990 mathematics test relatively difficult; 17% of all questions were in the easy category compared to 32% in the very difficult category. Students, in general, found questions on space and number relatively easy compared to those on number relations and measurement. Selected questions from the paper are included in Appendix IV.

PERCENTAGE CORRECT ON ITEMS

Table 6: Difficulty of Items for Mathematics Year 7

% ANSWERED CORRECTLY	DIFFICULTY	NUMBER OF ITEMS
65 - 100%	Easy	10
40 - 64%	Moderately difficult	31
< 40% ,	Very difficult	19

A total of 1850 students was tested. Table 6 gives the number of items in each category of difficulty. It shows that the majority of items fell in the moderately difficult category. Students experienced least difficulty with question 1, with 92.92% answering correctly compared to only 6.11% responding correctly to question 50. 50.59% of students answered question 38 correctly. These three items are reproduced in Appendix IV.

DISTRIBUTION OF TEST SCORES.

Graph 2: Distribution of Scores: Mathematics Year 7

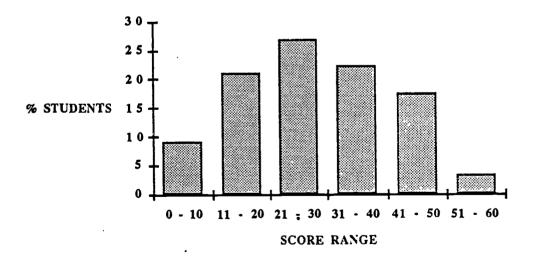




Table 7: Distribution of Scores: Mathematics Year 7

SCORE RANGE	NUMBER OF STUDENTS	PERCENTAGE OF STUDENTS
0 - 10	167	9.03
11 - 20	390	21.08
21 - 30	497	26.86
31 - 40	411	22.22
41 - 50	324	
51 <u>-60</u>	61	3.30
Total	1850	100.00

As shown in Table 7, 9.03% of students scored less than 10, while 3.30% answered between 51 and 60 questions correctly. The largest group of students, 497, attained scores of between 21 and 30. More students (67) achieved a score of 29 than any other score. 56.97% obtained scores in the range 0 to 30, while 43.03% answered more than 30 items correctly. The highest score was 60 (1 student) and the lowest score was 0 (9 students). The results, as might be expected, approach a normal distribution, as shown in Graph 2.

MEANS FOR SUBTESTS

Table 8: Means on Subtests: Mathematics Year 7

SUBTEST	NUMBER OF ITEMS	MEANS	STANDARD DEVIATIONS
Number	14	7.66	3.45
Number relations	12	5.42	3.07
Measurement	16	6.54	3.81
Space	11	4.86	2.48
Graphs/Statistics	7	3.89	1.82
Total Test	60 •	28.39	13.04

Individual scores varied considerably as shown by the standard deviations for the various subtests and total test.

Table 9: Difficulty of Items by Subtest: Mathematics Year 7

SUBTEST	NUMBER OF ITEMS			
	Easy	Moderate	Very Difficult	Total
Number		11	3	14
Number relations	3	5	4	12
Measurement	0	9	7	16
Space	7	0	4	11
Graphs/Statistics	0 .	6	1	7
Total Test	10	31	19	60

Few students found questions relating to number relations, measurement, space or graphs and statistics easy. Nearly half of measurement questions caused difficulty. The number questions relating to fractions caused difficulty.



COMPARISON

Table 10: Comparison Between 1988, 1989 and 1990 Performance: Mathematics Year 7

ITEM NO.	Pi	ROPORTION CORRECT	
(as 1990)	1988	1989	1990
Est (1989 - qn 30)	0.84	0.87	(0.87)
Est (1989 - qn 50)		0.67	(0.67)
Est (1989 - qn 60)	0.25	0.25	(0.25)
3	0.56	0.63	0.62
6	0.63	0.68	0.73
12	0.55	0.63	0.62
27	0.33	0.40	0.41
35	0.48	0.58	0.57
40	0.58	0.68	0.63
42	0.42	0.56	0.55
43	0.43	0.48	0.46
44	0.61	0.66	0.65
46	0.37	0.43	0.44
50	0.04	0.05	0.06
59	0.36	0.40	0.40
MEANS	0.47	0.53	0.53
STD DEVIATION	0.19	0.20	0.20
NO. STUDENTS	1836	1797	1850
CORRELATION	0.99		0.95

Table 10 shows the results on the link items for 1988, 1989 and 1990. Figures in brackets for 1990 are estimates as the three items were not used in 1990. A t-test between means for correlated data on the link items shows that there was no difference between the results for 1990 and 1989. While some of the link items showed an increase in performance, the students of 1990 found greater difficulty with question 40 than those of 1989.



MATHEMATICS RESULTS: ABORIGINAL SCHOOLS

SUMMARY

Aboriginal students did not find the 1990 mathematics test particularly difficult. Questions on graphs and statistics did not appear to be difficult. Students had most difficulty with questions involving multiplication, division, measurement and space. Sample questions are included in Appendix V.

PERCENTAGE CORRECT ON EACH ITEM

Table 11: Difficulty of Items: Mathematics Aboriginal Schools

% ANSWERED CORRECTLY	DIFFICULTY	NUMBER OF ITEMS
65 - 100%	Easy	15
40 - 64%	Moderately difficult	28
< 40%	Very difficult	17

A total of 1358 students sat the test. Table 11 gives the number of items in each category of difficulty. It shows that the majority of items fell in the moderately difficult category. Students experienced least difficulty with question 21, with 90.57% answering correctly compared to only 4.12% responding correctly to question 31. 51.77% of students answered question 43 correctly. These three items are reproduced in Appendix V.

DISTRIBUTION OF TEST SCORES

Graph 3: Distribution of Scores: Mathematics Aboriginal Schools

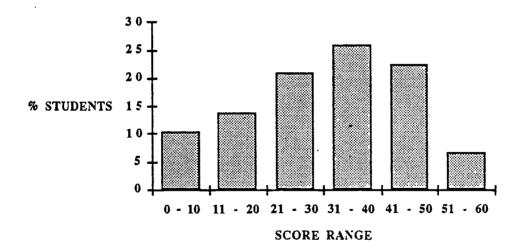




Table 12: Distribution of Scores: Mathematics Aboriginal Schools

SCORE RANGE	NUMBER OF STUDENTS	PERCENTAGE OF STUDENTS
0 - 10	139	10.24
11 - 20	188	13.84
21 - 30	286	21.06
31 - 40	351	25.85
41 - 50	305	22.46
51 - 60	. 89	6.55
Total	1358	100.00

As shown in Table 12, 10.24% of students scored less than 10 compared to 6.55% answering between 51 and 60 correctly. The largest number of students, 351, achieved scores in the range 31 to 40, with more students, 41, obtaining a score of 31 than any other score. Scores in the range 0 to 30 were attained by 45.14% of students, while 54.86% answered more than 30 items correctly. The highest score was 60 (2 students) and the lowest score was 0 (16 students). The results approach a normal distribution, as shown in Graph 3.

MEANS FOR SUBTESTS

Table 13: Means on Subtests: Mathematics Aboriginal Students

SUBTEST	NUMBER OF ITEMS	MEANS	STANDARD DEVIATIONS
Number	13	6.40	3.59
Number relations	. 13	6.70	3.61
Measurement	11	5.17	2.61
Space	16	8.37	3.81
Graphs/Statistics	· 7	4.34	2.27
Total Test	60	30.98	14.15

Individual scores varied considerably, as can be seen from the standard deviations for the subtests and total test.

Table 14: Difficulty of Items by Subtests: Mathematics Aboriginal Schools

SUBTEST	Easy	Moderate	Very Difficult	Total
Number	4	4	5	13
Number relations	3	8	2	13
Measurement	2	4	· 5	11
Space	4	7	5	16
Graphs/Statistics	2 •	5	0	7
Total Test	15	28	17	60

Students did not find any questions relating to graphs and statistics difficult; most questions in the moderately difficult group relate to number relations and space. Students had difficulty with multiplication and division. Other areas of difficulty included knowing and using units of measurement and questions relating to area, perimeter and enlargement.



READING - INTRODUCTION

Three multiple choice reading tests were set for both Years 5 and 7 in urban schools: two reading cor prehension (literal and inferential) and one reading for different (functional) purposes. Teachers were asked to allow sufficient time for students to complete each reading test. This ranged from fifteen to thirty minutes, depending on the test.

Four multiple choice reading tests were set for Aboriginal schools, two reading comprehension (literal and inferential) and two reading for different (functional) purposes. Each student was required to sit one of each, the time taken to complete being left to the discretion of the teachers.

The tests measuring literal and inferential comprehension used prose passages selected from materials normally encountered in the classroom. Question measuring literal comprehension required students to identify significant ideas, to arrange events in sequence, to locate specific details and facts and to give meaning to words in context. Questions measuring inferential comprehension required students to make inferences from given facts, to draw conclusions, to identify character traits and to determine the cause of events.

The tests in reading for different (functional) purposes were based on reading materials found in daily life, for example a newspaper advertisement or a tourist guide. Students were required to use materials, locate information, follow directions, use library reference skills and interpret information from a variety of sources.

Each chapter includes a table showing the number of items for each category of difficulty (Difficulty of Items). The results on individual items are grouped into three categories to give some idea of the difficulty of questions. The categories of difficulty are as follows:

- items answered correctly by 65 100% of students were classified as easy
- items answered correctly by 40 64% of students were classified as moderately difficult
- items answered correctly by less than 40% of students were classified as very difficult.

The tests included a wide variety of questions at different levels of complexity. That some students were unable to answer some of the more difficult questions is to be expected, since part of the function of these tests is to give some indication of the differing levels at which Year 5, Year 7 and Aboriginal students are operating.

A table is also included of the distribution of scores and performance for each score range (Distribution of Scores), as well as one of the means and standard deviations of each test.

In 1988, the reading tests were revised to correct ambiguities and streamline the test length: this involved changes to several questions and made a comparison of pre-1988 tests with later tests impossible. In 1989, urban schools administered a retelling test from the TORCH series (TORCH: Tests of Reading Comprehension published by ACER), a similar test was not administered in 1990. Where possible, the 1990 test has been compared with earlier tests.

A t-test between means for correlated data was used. This test of significance considered data from individual items, using percentage correct values. It is more sensitive than a t-test between means since it uses data from all items.



READING RESULTS: YEAR 5

SUMMARY

Year 5 students did not find the reading for comprehension and reading for functional purposes tests difficult.

PERCENTAGE CORRECT ON EACH ITEM

Table 15 - Difficulty of Items: Reading Year 5

% ANSWERED CORRECTLY	DIFFICULTY	NO URS5C5	ITEMS URS5C7	UR5R90
65 - 100%	Easy	5	6	21
0 - 64%	Moderately difficult	5	4	6
< 40%	Very Difficult	0	0	2
Total		10_	10	

A total of 1907 students sat the reading comprehension test URS5C5. No question fell into the very difficult category, the questions being equally divided between being easy and moderately difficult. The most difficult question was number 5, to which 43.63% responded correctly, while the least difficult, question 6, was answered correctly by 84.95% of students. Question 5 required finding a synonym for a word within the text, whereas question 6 required only the ability to take a literal meaning from the text. These questions are reproduced in Appendix VI.

A total of 1906 students were tested in the reading comprehension test URS5C7. None of the questions fell into the very difficult category, slightly more questions were in the easy category than in the moderately difficult. The least difficult question, number 5, was answered correctly by 85.15% of students, while the most difficult was question 9, to which 50.21% of students responded correctly. Question 5 required students to apply one of four simple adjectives, while question 9 required resolving a sequence of events. These questions are reproduced in Appendix VII.

The functional reading test, UR5R90, was administered to 1902 students. The majority of questions fell in the easy category, with the least difficult question, number 1, being answered correctly by 87.70% of students. The most difficult question was number 21, to which 12.72% of students responded accurately. The mid-range of moderately difficult questions, number 8, was answered correctly by 59.15% of all students. Question 1 related to a map of Kakadu: it required the interpretation of symbols. Question 21, based on the contents page of a magazine, required the student to make inferences. These questions are reproduced in Appendix VIII.

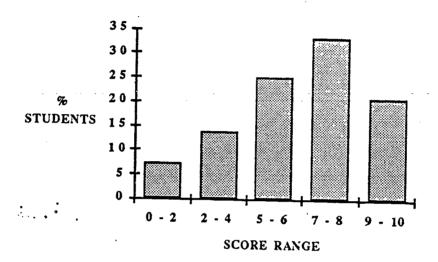


DISTRIBUTION OF TEST SCORES

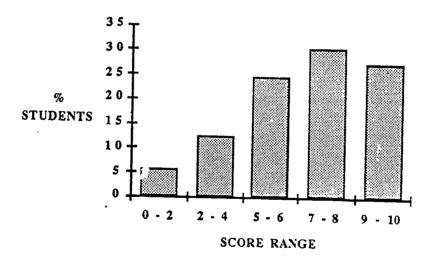
Table 16 - Distribution of Scores: Reading Year 5

SCORE RANGE	URS5C5 Number	%	URS5C7 Number	%	SCORE RANGE	UR5R90 Number	
0 - 2 2 - 4 5 - 6 7 - 8 9 - 10	139 264 473 634 397	7.29 13.83 24.92 33.14 20.82	106 234 468 579 519	5.56 12.28 24.55 30.38 27.23	0 - 5 6 - 10 11 - 15 16 - 20 21 - 25	78 -126 179 363 812	4.10 6.62 9.41 19.09 42.69
Total	1907	100	1906	100	26 - 29 Total	344 1902	18.09

Graph 4: Distribution of Scores: Reading Year 5 - Test URS5C5

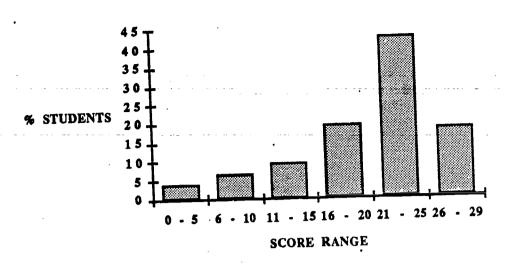


Graph 5: Distribution of Scores: Reading Year 5 - Test - URS5C7





Graph 6: Distribution of Scores: Reading Year 5 - Test - UR5R90



As shown in Table 16 and Graph 4, 7.29% of students scored 2 or less in the reading comprehension test URS5C5. Scores of 5 or more were attained by 78.88% of students. The highest score was 10 (130 students), and the lowest score was 0 (27 students). Eight was the most frequent score, being attained by 321 students.

As shown in Table 16 and Graph 5, in the reading comprehension test URS5C7, 5.56% of all students scored 2 or under, with 82.16% of students scoring 5 or over. The highest score was 10 (204 students) and the lowest was 0 (20 students). More students (315) scored 9 than any other score in the 29-caustion test.

As shown in Table 16 and Graph 6, in the reading for other purposes test, UR5R90, 4.10% of students scored 5 or less. 79.87% of students scored 16 or more. The highest score was 29 (15 students) and the lowest was 0 (18 students). More students (185) scored 25 than any other score.

MEANS FOR SUBTESTS

Table 17: Means on Reading: Year 5

- (500F)	NO. ITEMS	MEANS	STD DEV	NO. STUDENTS
TEST (CODE) Reading Comp (URS5C5) Reading Comp (URS5C7) Reading Purp (UR5R90)	10	6.40	2.39	1907
	10	6.75	2.34	1906
	29	20.10	6.42	1902

Individual scores varied considerably, as is evidenced by the standard deviations.



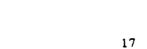
COMPARISON

Table 18: Comparison Between 1989 and 1990 Performance: Year 5

ITEM NO.	TEST	C5
	1989	1990
1	0.74	0.70
2	0.76	0.68
3 - 7	0.64	0.65
4	0.82	0.76
6	0.84	0.85
7	0.70	0.65
8	0.54	0.48
9	0.51	0.56
10	0.68	0.62
MEAN	0.69	0.66
STDEV	11.36	10.73
NO. STUD	421	1907
CORRELATION	0.93	

ITEM NO.	TEST	C7
	1989	1990
1	0.46	0.59
4 .	0.66	0.76
6 7	0.76	0.77
7	0.68	0.69
8	0.58	0.62
	0.50	0.50
10	0.62	0.70
		:
MEAN	0.61	0.66
STDEV	10.41	9.50
NO. STUD	480	1906
CORRELATION	0.87	

A t-test beween means for correlated data on the link items in test C5 shows a slight decrease in performance in 1990 compared with 1989, while the same statistical test on the means for link items in C7 shows an improvement.





READING RESULTS: YEAR 7

SUMMARY

The Year 7 students found the reading for comprehension and the reading for functional purposes tests relatively easy since most items in all three tests fell in the easy category.

PERCENTAGE CORRECT ON EACH ITEM

Table 19: Difficulty of Items: Reading Year 7

% ANSWERED CORRECTLY	DIFFICULTY	URS7C3	URS7C8	UR790
65-100%	. Easy	10	8	25
40 - 64%	 Moderately difficult 	4	6	6
<40%	Very difficult	1	1	1
Total		15	15	32

A total of 1821 students sat the reading comprehension test URS7C3. The majority of questions were in the easy category, with only one question being found very difficult. The easiest question was number 10, which 92.26% of all students answered correctly, while the most difficult was question 2, to which 39.04% of students responded correctly, Question 10 required an inferential answer, while question 2 required students to put four statements into a logical sequence. The mid-range moderately difficult question 12, was answered correctly by 54.86% of students. Question 12 required students to choose between four statements as to which was an opinion, it was a non-text-related question. These questions are reproduced in Appendix IX.

The reading comprehension test, URS7C8 was administered to 1832 students. Most questions were in the easy category, with only one being found very difficult. The most difficult question was number 13, which only 23.31% of all students answered correctly compared to the easiest question, number 7, to which 92.96% of students responded correctly. Question 13 required students to take a variety of facts presented in different places within the text and to calculate an answer. Question 7 required simply looking at the text for an almost verbatim response. The mid-range moderately difficult question 15 was answered correctly by 61.57% of students. Students were required to make sense of a simple phrase. These questions are reproduced in Appendix X.

The reading for different purposes test UR7R90 was taken by 1792 students. Most questions were in the easy category. The most difficult question was number 31, which was answered correctly by 35.99% of students, while the easiest, question 2, was answered correctly by 96.37% of students. Question 31 required students to read a series of book reviews and complete a form satisfactorily. This question is reproduced in Appendix XI. Question 2 required only the ability to scan an advertisement and make choices between two entries. The mid-range moderately difficult question, number 27, was responded to accurately by 62.77% of students. These questions are reproduced in Appendix XI.

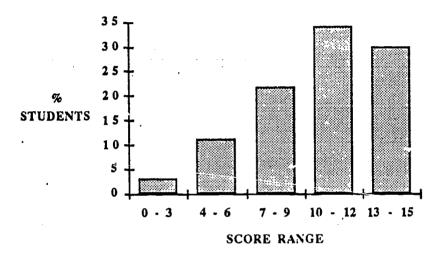


DISTRIBUTION OF TEST SCORES

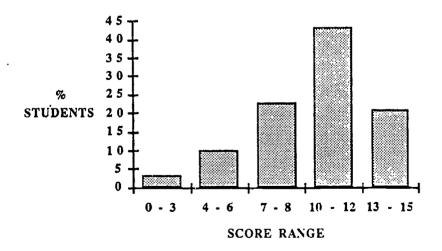
Table 20: Distribution of Scores: Reading Year 7

SCORE RANGE	URS7C3 Number	%	UR7SC8 Number	%	SCORE RANGE	UR7R90 Number	%
0 - 3	57	3.13	64	3.49	0 - 5	16	0.89
4 - 6	202	11.09	186	10.16	6 - 10	37	2.07
7-9	398	21.86	413	22.54	11 - 15	78	4.35
10 - 12	621	34.10	790	43.12	16 - 20	152	8.48
13 - 15	543	29.82	379	20.69	21 - 25	402	22.44
					26 - 30	904	50.44
				•	31 - 32	203	11.33
Total	1821	100	1832	100	Total	1792	100

Graph 7: Distribution of Scores: Reading Year 7 - Test URS7C3

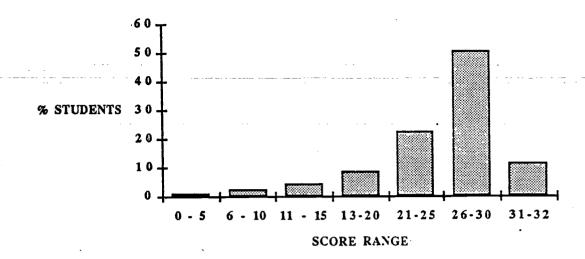


Graph 8: Distribution of Scores: Reading Year 7 - Test URS7C8





Graph 9: Distribution of Scores: Reading Year 7 - Test UR7R90



As shown in Table 20 and Graph 7, in the reading comprehension test URS7C3, 3.13% of students scored 3 or less, compared to 29.82% who scored 13 or more. The highest score was 15 (106 students) and the lowest was 0 (11 students). 85.74% of students scored 7 or over. More students (241) attained scores of 13 than any other score.

As shown in Table 20 and Graph 8, in the reading comprehension test URS7C8, 3.49% of students scored 3 or less, compared to 20.69% who scored 13 or over. The highest score was 15 (49 students) and the lowest was 0 (8 students). 86.35% of students answered 7 or more questions accurately. The most common score was 12, attained by 291 students.

As shown in Table 20 and Graph 9, in the reading for other purposes test UR7R90, 0.89% of students scored 5 or less, compared to 11.33% who scored 31 or 32. The highest score was 32 (60 students) and the lowest was 0 (8 students). 92.69% of all students scored 16 or more. More students, 210, attained scores of 28 than any other score.

MEANS FOR SUBTESTS

Table 21: Means on Reading: Year 7

TEST (CODE)	NO. ITEMS	MEANS	STD DEV	NO. STUDENTS
Reading Comp (URS7C3)	15	10.32	3.29	1821
Reading Comp (URS7C8)	15	10.06	3.06	1832
Reading Purp (UR7R90)	32	25.35	_ 5.72	1792

Individual scores varied considerably.



COMPARISON

Table 22: Comparison Between 1989 and 1990 Performance: Year 7

ITEM NO.	TEST	C3
	1989	1990
1	0.85	0.83
2 .	0.32	0.39
3	- 0.84	0.91
4	0.62	0.67
5 ·	0.78	0.82
• 6	0.69	0.71
7	0.61	0.64
8	0.69	0.69
9	0.71	0.74
10	0.91	0.92
11	0.62	0.66
12	0.55	0.55
13 ·	0.78	0.79
14	0.39	0.44
MEAN	0.67	0.70
STDEV	16.93	15.85
NO. STUD	389	1821
CORRELATION	0.99	

ITEM NO.	TEST	C8
	1989	1990
1	0.93	0.91
2	0.62	0.60
3	0.84	0.87
5	0.76	0.80
6	0.65	0.66
7	0.95	0.73
8	0.69	0.73
9	0.63	0.63
10	0.70	0.64
11	0.82	0.81
12	0.70	0.74
13	0.21	0.23
14	0.37	0.45
15	0.65	0.62
MEAN	0 .6 8	0.67
STDEV	19.99_	17.51
NO. STUD	439	1832
CORRELATION	0.93	

A t-test between means for correlated data on the link items in test URS7C3 shows an improvement in performance in 1990 compared with 1989. There was no marked difference between the performance of students taking test URS7C8 in 1990 compared with those of 1989.





READING RESULTS: ABORIGINAL SCHOOLS

SUMMARY

By a process of sampling, Aboriginal students sat either the reading comprehension test ABC8 and the reading for different purposes test ABR7, or the reading comprehension test ABC10 and the reading for different purposes test ABR16. There were ten questions in each of the tests ABC8, ABC10 and ABR16, while test ABR7 consisted of only nine items. Students found few questions on any paper to be easy, the majority of items ranged from moderately difficult to very difficult.

PERCENTAGE CORRECT ON EACH ITEM

Table 23: Difficulty of Items: Reading Aboriginal Schools

% ANSWERED CORRECTLY	DIFFICULTY	TEST			
		ABC8	_ABR7	ABC10	ABR 16
65 - 100%	Easy	1	0	0	0
40 - 64%	Moderately difficult	9	6	7	· 9
< 40%	Very difficult	0 _	3	3	1
Total		10_	9	10	10

The reading comprehension test ABC8 was taken by 582 students. Only one question, number 1, was in the easy category. This was answered correctly by 70.27% of students. The response was a literal extract from the text. No question fell into the very difficult category. The most difficult question of the moderately difficult category, number 10, was answered correctly by 42.10% of all students. Question 10 required students to give the best name for a story. These questions are reproduced in Appendix XII.

The reading for different purposes test ABR7 was sat by 567 students. No question was in the easy category, the majority of questions being in the moderately difficult category. Three questions were in the very difficult category, of which number 4 was the most difficult with 28.40% of students answering correctly. This question required students to use a contents page to determine the length of a specific story. The easiest question was question 6, which was answered correctly by 63.67% of all students. This question required very little skill. These questions are reproduced in Appendix XIII.

A total of 704 students sat the reading comprehension test ABC10. No question fell into the easy category, the majority being in the moderately difficult category. The easiest question, number 4, was answered correctly by 63.21% of students. The response to this question was a literal transcription from the test. The most difficult question was number 10, to which 30.11% of all students responded correctly. This question required students to understand the underlying theme of the text and the questions. These questions are reproduced in Appendix XIV.

The reading for other purposes test ABR16 was administered to 703 students. No question fell into the easy category, the majority being in the moderately difficult category. The easiest was question 4, to which 62.59% of all students responded correctly. The response to this question was to be found in several places on the stimulus material. The most difficult question was number 2, which 30.87% of students answered correctly. This question required students to draw conclusions from the data presented in a timetable. These questions are reproduced in Appendix XV.



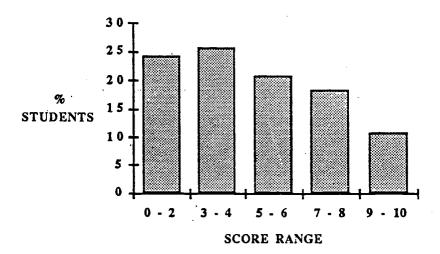
DISTRIBUTION OF TEST SCORES

Table 24: Distribution of Test Scores: Aboriginal Schools

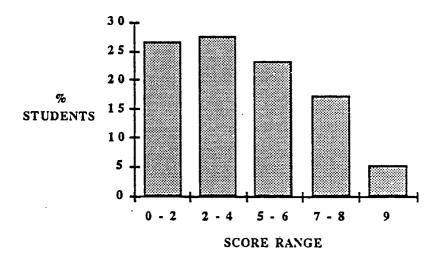
SCORE RANGE	ABC8 Number	%	ABR7 Number	%	ABC10 Number	%	ABR16 Number	%
0 - 2	110	18.90	151	16.93	170	24.15	174	24.75
3 - 4	136	23.37	156	22.22	181	25.71	164	23.33
5 - 6	128	21.99	132	26.46	147	20.88	128	18.21
7 - 8	102	17.53	98	22.04	130	18.46	145	20.62
9 - 10	106	18.21	30 *	12.35	7 6	10.80	92	13.09
Total	582	100	567	100	704	100_	703	100

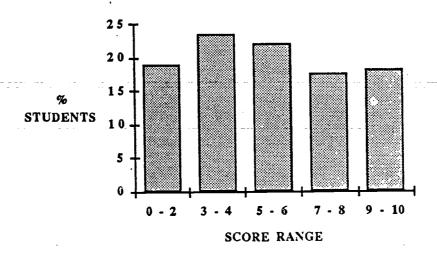
^{*} score range = 9

Graph 10: Distribution of Test Scores: Aboriginal Schools - Test ABC10

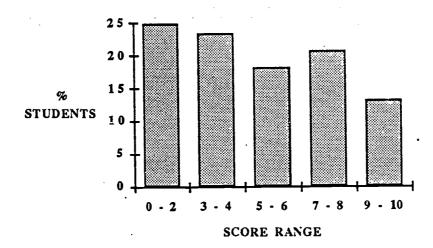


Graph 11: Distribution of Test Scores: Aboriginal Schools - Test ABR7





Graph 13: Distribution of Test Scores: Aboriginal Schools - Test ABR16



In the reading comprehension test ABC8, 18.90% of all students scored 2 or less, compared to 18.21% who attained scores of 9 or more. The highest score was 10 (36 students) and the lowest was 0 (24 students). 57.73% of all students scored 5 or more. More students (74) attained scores of 3 than any other score.

In the reading for different purposes test ABR7, 16.93% of all students scored 2 or less, compared to 12.35% who attained scores of 9. The highest score was 9 (30 students) and the lowest was 0 (47 students). 60.85% of all students attained scores of 5 or more. The most common score was 4, being scored by 85 students.

In the reading comprehension test ABC10, 24.15% of students scored 2 or less, compared to 10.80% who attained scores of 9 or more. The highest score was 10 (29 students) and the lowest was 0 (41 students). 50.14% of all students scored 5 or more. More students (100) scored 4 than any other score.

In the reading for different purposes test ABR16, 24.75% of all students scored 2 or less, compared to 13.09% who attained scores of 9 or more. The highest score was 10 (44 students) and the lowest was 0 (65 students). 51.92% of all students scored 5 or more. The most common score was 3, attained by 85 students.





MEANS FOR SUBTESTS

Table 25: Means on Reading: Aboriginal Schools

TEST(CODE)	NO. ITEMS	MEANS	STD DEV	NO. STUDENTS
Reading Comp (ABC8)	10	5.27	2.87	
Reading Purp (ABR7)	9	5.34	2.64	<i>5</i> 67
Reading Comp (ABC10)	10	4.76	2.77	704
Reading Purp (ABR16)	10	4.88	3.00	703.

Individual scores varied considerably, as is shown by the standard deviations for the various tests.



SUMMARY AND CONCLUSION

No changes were made to the structure of the Primary Assessment Program mathematics tests for urban or Aboriginal schools in 1990: the mathematics tests for urban schools were designed to test achievement on the whole curriculum, while those for Aboriginal schools tested minimum competency expected of Year 5 students.

Year 5 students in urban schools found questions involving graphs and statistics and most numerical computations relatively easy. Some difficulties were experienced in translating written statements into mathematical computations and in the use of decimals and fractions. The test proved to be moderately difficult with the majority of students attaining scores between 21 and 50, with relatively few students attaining scores in the high 50s or 0. Analysis of link items showed that the students of 1990 performed slightly better than those of 1989.

Year 7 students in urban schools found questions on space relatively easy. Some difficulties were encountered with questions involving measurement and the computation of decimals and fractions. The test proved to be moderately difficult. Few students attained scores of 51 to 60. Analysis of link items showed that the students of 1990 performed equally well compared with those of 1989, but better than those in 1988.

The mathematics questions for students in Aboriginal schools were relatively well distributed between the three categories of difficulty. Questions involving graphs and statistics were found to be the least difficult items, while those involving measurement caused some difficulty. It would be fair to say that students had difficulty in many areas.

Changes were made to the 1990 reading tests in that the retelling exercise was not repeated but was replaced by a reading comprehension test. Both tests had been used in 1989 and thus it was possible to make comparisons with earlier years.

Year 5 students in urban schools did not find the reading tests difficult. Results for the two reading comprehension tests are not markedly different, although students had slightly more difficulty with test URS5C5 than URS5C7. A considerable number of students attained full marks in both tests, 6.82% and 10.70% respectively compared with 1.41% and 1.05% who scored 0. Still less difficulty was experienced with the reading for different (functional) purposes test, with the majority of students attaining scores in excess of 21 for the 29-item test. Although the analysis of data relating to link items shows a slight decline in the performance of 1990 students taking the test URS5C5 compared with those of 1989, this is outweighed by better results of those same students sitting the test URS5C7 compared with their counterparts of the previous year.

The Year 7 students did not find the reading tests to be difficult, with most questions in the tests being in the easy category. The majority of students scored 10 or more out of 15 in the reading comprehension tests. Still less difficulty was experienced in the reading for different (functional) purposes test, with 11.33% of students attaining scores of 31 or 32 out of 32. Although there was no significant difference between the performance of 1990 students taking URS7C8 compared with students of 1989, some improvement was seen in the performance of students taking test URS7C3 in 1990 compared to those in 1989.

Although Aboriginal students did not find the reading tests particularly difficult, neither did they find them easy, the majority of questions fell in the moderately difficult category. The reading comprehension test ABC10 was found to be more difficult than the reading comprehension test ABC8, while the reading for different (functional) purposes test ABR16 was found to be more difficult than test ABR7. The score ranges for all tests were more evenly distributed than those for urban schools, particularly for the reading comprehension test ABC8.



APPENDIXES





APPENDIX I. NT BOARD OF STUDIES - Primary Assessment Committee (1990)

Mr C Fowler Mr R Abbott Mr N Cockshutt Mr Z S Huang Mr M Myers Ms S Murphy

(Chair) Superintendent - ERA Principal - Millner Primary School Superintendent - Curriculum
Principal Research Officer
Principal - Moil Primary School
(Executive Officer) Senior Education Officer



APPENDIX II - 1990 TEST CONSTRUCTION PANELS

YEAR 5 MATHEMATICS

Mr A Loh (Convenor) Curriculum and Assessment Branch

Ms L Badlu Karama Primary School Jingili Primary School Ms L Gammon Malak Primary School Ms L Hassett Mr J Hubbard Nakara Primary School Mr P McPhee Anula Primary School Wanguri Primary School Ms L Tolomei Ms C Williams Sanderson Primary School Wagaman Primary School Ms D Nelson

YEAR 7 MATHEMATICS

Mr A Loh (Convenor) Curriculum and Assessment Branch

Darwin High School Ms S Clarke Ms L Gammon Jingili Primary School Holy Spirit Primary School Mr G Gillman Ms L Hassett Malak Primary School Ms D Lee Nightcliff High School St John's College Mr G McCormack Anula Primary School Mr P McPhee Nakara Primary School Ms B Reif Wanguri Primary School Mr A Sargent Karama Primary School Mr P Scott Ms J Wessels Sanderson Primary School

READING

Ms S Murphy (Convenor) Curriculum and Assessment Branch

Mr R Bekkers
Malak Primary School
Ms N Bell
Anula Primary School
Ms W Jacob
Schools North Branch
Ms C Labowitch
Ms C Makepeace
Ms J Payne
Ms J Wessells
Malak Primary School
Manula Primary School
Wagaman Primary School
Ms J Wessells
Sanderson Primary School

ABORIGINAL MATHEMATICS

Ms S Murphy (Convenor) Curriculum and Assessment Branch

Mr P Bubb
Schools North Branch
Mr B Kepert
Ms J Perrin
Mr W Turner
Mr L West
Schools North Branch
Moil Primary School
Millner Primary School

ABORIGINAL READING TEST - revision

Ms S Murphy
Ms S Luong-Van

Curriculum and Assessment Branch
Curriculum and Assessment Branch



APPENDIX III - MATHEMATICS ITEMS - YEAR 5

Easy Item

16. Complete the last square in the pattern.









(S6A3m)

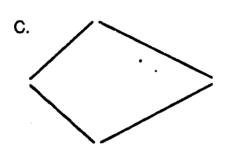
% Correct = 82.29

Moderately Difficult Item

53. Which of these fences could be rearranged to make a rectangle?



В.



D.

Answer: C

(S4A4m)

% Correct = 52.53

Difficult Item

24. Write these numbers from smallest to largest.

0.6 1.6

0.06

0.6

0.66

0.16

Answer: 0.06 0.16

0.66

1 6

(NR5A3h)

% Correct = 11.00

52. A length of rope 10 m long was cut into three pieces. The first piece was 4.5 m long and the second was 2.6 m long. What was the length of the third piece of rope?

Answer: ____2.9 m

APPENDIX IV - MATHEMATICS ITEMS - YEAR 7

Easy Item

1.

(NA7A2e)

Answer: 6 123

% Correct = 92.92

Moderately Difficult Item

- 38. Circle a number which is both odd and prime.
 - A.
- 51
- **B** .
- 17
- C.
- 2
- D.
- 91

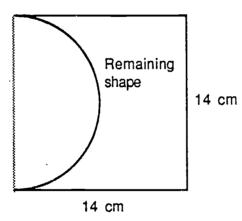
(NR8A3m)

% Correct = 50.59

Difficult Item

50. A semi-circle is cut from a square with sides 14 cm long. Calculate the perimeter of the new figure.

(Use perimeter of circle, P = 2pr. Take p as $\frac{22}{7}$)



Answer: ____64 cm

(ML3A4h)

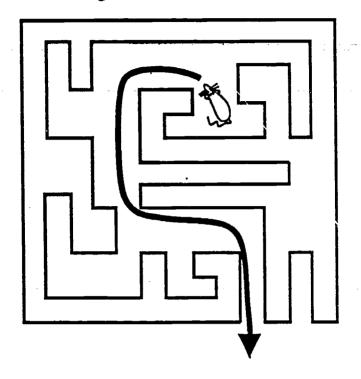
% Correct = 6.11



APPENDIX V - MATHEMATICS ITEMS - ABORIGINAL SCHOOLS

Easy Item

21. Draw a path for the mouse to get out. Do not cross a line.

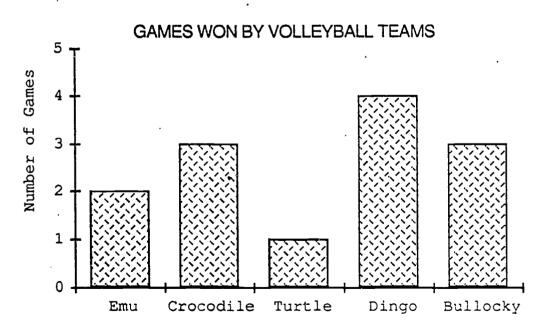


S4(S7A3e)

% Correct = 90.57

Moderately Difficult Item

LOOK AT THE GRAPH





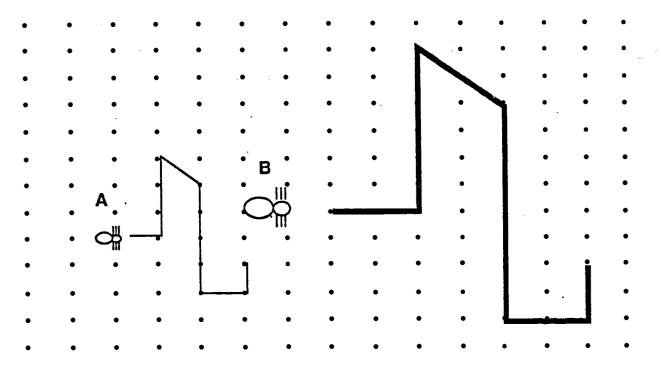
- 43. Which teams won the same number of games?
 - A. Bullocky and Turtle
 - B. Crocodile and Bullocky
 - C. Emu and Crocodile
 - D. Dingo and Crocodile

S4(GS4A4m)

% Correct = 51.77

Difficult Item

31. Make a longer path for ant B by drawing through twice as many dots. Make each step of the ant twice as long.



% Correct = 4.12



APPENDIX VI - READING URS5C5 - YEAR 5

The Leathery Turtle

- 1. The Leathery Turtle can be found in all the warmer oceans of the world, and in the larger bays and rivers along the east coast of Australia. It is the biggest of all sea turtles and can grow to a length of two metres. Its thick, black, leathery skin is smooth like velvet and often has small white or pink spots.
- 2. This turtle makes its nest in the soft sand of tropical beaches. There it scoops out a hole up to a metre deep and lays about ninety eggs the size of billiard balls. The nest is then covered over and the mother returns to the sea. About ten weeks later, three quarters of the eggs hatch, but only a small number of these will grow into adult turtles.
- 3. Foxes, dingoes and wild pigs brought to Australia from other places are predators of Leathery Turtle eggs. They also eat the babies, which are called hatchlings. Other young turtles are often eaten by birds and crabs as they leave the nest on their first trip to the sea. Then, as they are very tiny, they become easy prey for large fish and other creatures once they are in the water.
- 4. The Leathery Turtle is also threatened by human beings who raid the nest looking for eggs. A beach in Queensland called Mon Repos (which means 'my rest') is the only known nesting place for this species in Australia. It has been protected so that the Leathery Turtle can make its nest there without harm from people.
- 5. Countries all over the world are now trying to save the Leathery Turtle, and Australia is one place where laws have been made to help.

'Going, Going, Gone' - NELSON

Easy Item

- 6. What is special about Mon Repos Beach?
 - A. It has a foreign name.
 - B. There is nobody living at Mon Repos
 - C. It is a well-known beach in Queensland.
 - D. It is the only safe place where leathery turtles can nest.

% Correct = 84.95

Moderately Difficult Item

- 5. In paragraph 4 what is the meaning of the word threatened?
 - A. Protected
 - B. Injured
 - C. Endangered
 - D. Raid

% Correct = 43.63



APPENDIX VII- READING URS5C7 - YEAR 5

1. Barrump!

The shock of its landing rolled round the earth like an earthquake, spilling teacups in London, jolting pictures off the walls in California, cracking statues off their pedestals in Russia.

The thing had actually landed - and it was a terrific dragon.

Terribly black, terribly scaly, terribly knobbly, terribly horned, terribly hairy, terribly clawed, terribly fanged, with vast indescribably terrible eyes, each one as big as Switzerland. There it sat, covering the whole of Australia, its tail trailing away over Tasmania into the sea, its fore-claws on the headlands of the Gulf of Carpentaria. Luckily, the mountains and hills propped its belly up clear of the valleys, and the Australians could still move about in the pitch darkness, under this new sky this low, queer, covering of scales. They crowded towards the light that came in along its sides. Of course, whoever had been on a mountain-top when the dragon landed had been squashed flat. Nothing could be done about them. And there the horror sat, glaring out over the countries of the world.

What had it come for? What was going to happen to the world now the monstrosity had arrived?

- 3. Everybody waited. The newspapers spoke about nothing else. Aircraft flew near this space-bat-angel-dragon, taking photographs. It lay over Australia higher than any mountains, higher than the Hindu Kush in Asia, and its head alone was the size of Italy.
- 4. For a whole day, while the peoples of the earth trembled and wept and prayed to God to save them, the space-bat-angel-dragon lay resting, its chin sunk in the Indian Ocean, the sea coming not quite up to its bottom lip.
- 5. But the next morning, early, its giant voice came rumbling round the world. The space-bat-angel-dragon was speaking. It wanted to be fed. And what it wanted to eat was living things. People, animals, forests, it didn't care which, so long as the food was alive. But it had better be fed quickly, otherwise it would roll out its tongue longer than the Trans-Siberian railway, and lick huge tracks of life off the surface of the earth-cities, forests, farmlands, whatever there was. It would leave the world looking like a charred pebble unless it were fed and fed quickly.
- 6. Its voice shook and rumbled around the earth for a whole hour as it delivered its message. Finally it ended, and lay waiting.
- 7. The peoples of the world got together. If they fed it, how could they ever satisfy it? It would never be full, and every new day it would be as hungry as ever. How can you feed a beast the size of Australia? Australia is a vast land, all the countries of Europe will fit easily into Australia. The monster's stomach alone must be the size of Germany.
- 8. No, they would not feed it. The peoples of the world decided they would not feed this space-bat-angel-dragon or whatever it was they would fight it. They would declare war on it, and all get together to blast it off the face of the earth. And so it was that all the people of the earth declared war on the monster, and sent out their armed forces in a grand combined operation.



- 9. Rockets, projectiles of all sorts, missiles and bombs, shells and flame-throwers everything was tried. The smoke of the explosion drifted out over the Pacific like a black, crawling continent. The noise of the battle shook the world almost as much as the landing of the dragon had done, and for much longer.
- 10. Then the noise died down and the smoke cleared. And the peoples of the world cried in dismay. The dragon was actually smiling. Smiling! Aircraft flying daringly near photographed the vast face smiling, and the picture was in all the papers.

It was smiling as if it had been well tickled.

'The Space-Being and the Iron Man' - HUGHES, Ted

Easy Item

- 5. Which of these words best describes the dragon?
 - A. Horrible
 - B. Friendly
 - C. Clever
 - D. Naughty

% Correct = 85.15

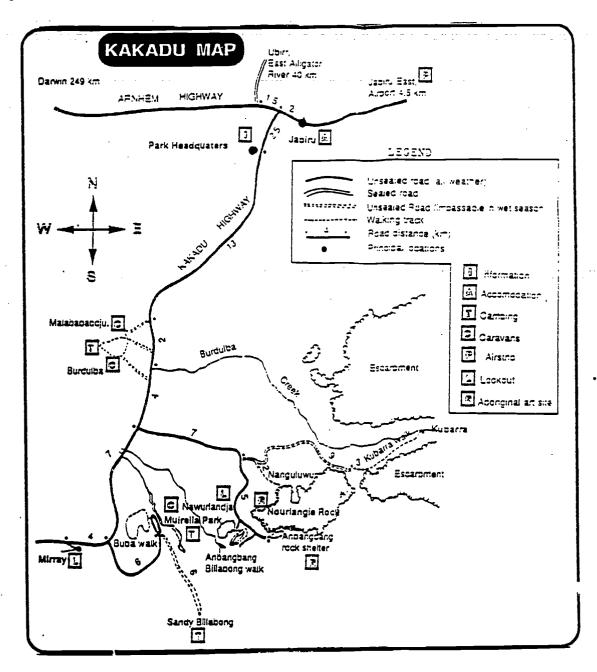
Moderately Difficult Item

- 9. Which of these happened first?
 - A. The people trembled, wept and prayed.
 - B. The dragon said it wanted food.
 - C. The people of the world got together.



APPENDIX VIII - READING FOR DIFFERENT PURPOSES UR5R90 - YEAR 5

Easy Item



Look at the KAKADU map on your news sheet to help you answer these 5 questions

- 1. At which site is camping allowed?
 - A. Park Headquarters
 - B. Jabiru
 - C. Muirella Park
 - D. Nourlangie Rock

% Correct = 87.70

Moderately Difficult Item

Check the MOVIE GUIDE and answer these 5 questions.

MOVIE GUIDE

OLD TOWN CINEMA CENTRE

BARGAIN MATINEE \$6.00 BEFORE 6 PM MON-FRI BLOOD OATH (M) Today, Tue, Wed at 10.30am, 1.00, 5.00 7.15, 9.30pm.

THE LITTLE MERMAID (G) Today, Tue, Wed at 11.00am. Adults at children's prices.

THE GUARDIAN (M) Today, Tue, Wed at 1.00, 5.00, 9.15pm.

THE TALL GUY (M) Today, Tue, Wed at 1.00, 7.15pm.

PRETTY WOMAN (M) Today, Tue, Wed at 10am, 1.00, 4.30 7.00 pm. Also 9.30 pm Tue, Wed.

BIRD ON A WIRE (M) Today, Tue, Wed at 10.30am, 5.00, 7.15pm, 9.30pm.

BACK TO THE FUTURE III (PG) Today, Tue, Wed at 10.30am, 7.15pm.

DICK TRACY (PG) Today, Tue, Wed at 1.00, 5.00, 9.30pm.

OLD TOWN TWIN CINEMAS

CADILLAC MAN (M) plus MAD HOUSE (M) Today, Tue, Wed at 9.30am, 7.00pm

RENEGADES (M) plus NO HOLDS BARRED (M) Mon, Tue, Wed at 7.15pm.

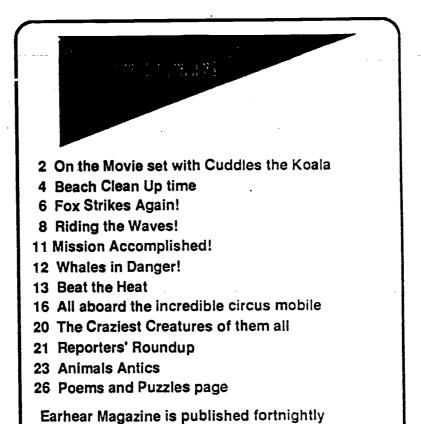
- 8. Which film is only showing once a day at Old Town Twin Cinemas?
 - A. The Little Mermaid.
 - B. Cadillac Man.
 - C. Mad House.
 - D. Renegades.

% Correct = 59.15



Difficult Item

Read the part called CONTENTS and answer these questions.



- 21. Write down the page number which is the beginning of a story that might be about:
 - A. The mysterious case of the missing chickens.

by Ed Cares. All rights reserved.

6

B. An exclusive interview with a furry movie star.

2

C. It has feathers, fangs, fur and four wheels.

16

D. Blue whales may be lost forever.

12

% Correct = 12.72

APPENDIX IX - READING URS7C3 - YEAR 7

Miyax, an Eskimo girl, is lost on the Alaskan tundra when she meets up with a pack of wolves.

- 1. She stepped onto the lake and skipped towards them. Halfway across she saw a dark head rise above the hill, and a beast with a head as large as the moon rose to its hind feet, massive paws swinging.
- 2. 'Grizzly!' she gasped and stopped stone still, as the huge animal rushed onto the ice. Amaroq and Nails leapt at its face and sprang away before the bear could strike. They were heading it off, trying to prevent it from crossing. The bear snarled, lunged forward and galloped towards Miyax.
- 3. She ran towards her tent. The wind vas in her face and she realised that she was downwind of the bear, her scent blowing right to him. She darted off in another direction, for bears have poor eyesight and cannot track if they cannot smell. Slipping and sliding, she reached the south bank as the grizzly staggered forward, then crumpled to its knees and sat down. She wondered why he was not in hibernation. The wolves had been sleeping all day they could not have wakened the bear. She sniffed the air to try to smell the cause, but only odourless ice crystals stung her nose.
- 4. The pack kept harassing the sleepy beast, barking and snarling, but with no intention of killing it. They were simply trying to drive it away away from her, she realized.
- 5. Slowly the bear got to its feet and permitted itself to be herded up the lake bank and back to where it had come from. Reluctantly, blindly, it staggered before the wolves. Occasionally it stood up like a giant, but mostly it roared in the agony of sleepiness.
- 6. Yapping, barking, darting, the wolves drove the grizzly far out on the tundra. Finally they veered away and, breaking into a joyous gallop, dashed over the snow and out of sight. Their duty done, they were running not to hunt, not to kill but simply for fun.
- 7. Miyax was trembling. She had not realized the size and ferocity of the dark bear of the North, who is called 'grizzly' inland, and 'brown bear' along the coast *Ursus arctos*. Large ones, like the grizzly her wolves had driven away, weighed over five hundred kilograms and stood nearly three metres tall when they reared. Miyax wiped a bead of perspiration from her forehead. Had he come upon her tent, with one curious sweep of his paw he would have snuffed out her life while she slept.

'Amaroq, Nails, Kapu,' she called, 'I thank you. I thank you.'

'Julie of the Wolves' - GEORGE, Jean C

Easy Item

- 10. How do we know that the wolves were protective of their mistress?
 - A. They drove the bear away from the camp.
 - B. They played games in the snow.C. They licked Miyax's face.
 - D. They ran away from the camp.

% Correct=92.26



Moderately Difficult Item

- 12. Choose the statement that is an opinion.
 - Miyax thanked the wolves Α.
 - B. .
 - Miyax froze when she saw the bear.

 Miyax was foolish to be travelling alone.

 Miyax's life was saved by the wolves. C.
 - D.

% Correct=54.86

Difficult Item

- Arrange these statements in the correct order. 2.
 - The grizzly rushed onto the ice. A.
 - Miyax ran towards her tent. B.
 - The wolves attacked the bear. C.
 - Miyax saw a dark head rise above the hill. D.

1.....D 2.....A 3.....C 4....B % Correct = 39.04

APPENDIX X - READING URS7C8 - YEAR 7

- 1. She was still young and very shy. Sudden fame from the Olympics became a nightmare. 'There were few places I could go without people recognising me', she wrote in despair. 'Some wanted to touch me to see if I was real, others just wanted to shake my hand or get my autograph and I could often feel people looking at me and talking about me...It got to the point where I didn't want to go anywhere but, if I did, I only went where I knew there wouldn't be too many people...I couldn't even go to the beach without people pestering me...I didn't have a life of my own any longer but was public property...I used to pray that I could be left alone.'
- As a result she lost her enthusiasm for running. Although she still won races, she failed to improve. Shortly afterwards, she announced her retirement. Most people believed that it was an injury that ended Betty Cuthbert's spectacular career in athletics. But later, Betty Cuthbert commented on this: 'I retired in 1960 for the simple reason that I thought I'd done enough', she said. 'But eighteen months after, I thought I wanted something to do and didn't know what. Suddenly a little voice kept telling me that I had to run again. I thought about this for two months, because I didn't want to run. But I couldn't sleep at nights because of this voice telling me I had to run again. And the little voice didn't stop. So I decided I was going to run. And as soon as I made the decision I felt terrific!'
- 3. So she returned to training. She was then too old for the short sprints, so she chose the 400 metres—a more strenuous event that relied on staying power and judgement of distance rather than flashing speed.
- 4. At the age of twenty-six Betty was selected to contest the 400 metres event in Tokyo in the 1964 Olympics.

Even when she qualified for the final, nobody expected her to win. And yet, when the moment came she led the race from start to finish.

And so, eight years after a triumph that nobody believed she could repeat, Betty Cuthbert once again stepped onto the victory rostrum at an Olympic stadium to receive a gold medal. And because she had not been expected to beat younger athletes over a distance not suited to sprinters, her fourth gold medal was perhaps the most satisfying of all.

5. When asked later what had given her most pleasure as an athlete, and what she missed most in retirement, Betty Cuthbert made it clear that it wasn't winning medals and getting her photograph in the newspapers.

'The emotion afterwards...those first ten seconds after the event, before I felt all those agonising pains...that's the moment I'd like to have again', she said. That's what she felt was best about athletics—the feeling inside herself. Something very private.

'Champions' - NELSON

Easy Item

- 7. Why did Betty compete in the 400 metres event?
 - A. She would have less competition.
 - B. She could win more medals.

40



- C. She was too old for short sprints.
- D. She would have less training to do.

%CORRECT=92.96

Moderately Difficult Item

- 15. In paragraph 4, the phrase she qualified for the final means
 - A. Betty was awarded a place in the finals because of her previous Olympic success.
 - B. Betty was the best Australian athlete.
 - C. Betty reached the final having won her earlier races.
 - D. Betty was the oldest competitor in the race.

%CORRECT=61.57

Difficult Item

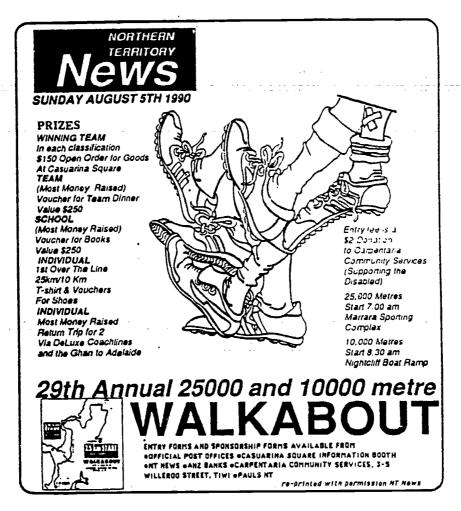
- 13. In which year was Betty first successful at the Olympic Games?
 - A. 1952
 - B. 1956
 - C. 1960
 - D. 1964

% CORRECT=23.31



APPENDIX XI- READING FOR DIFFERENT PURPOSES - YEAR 7

Easy Item



Read the WALKABOUT advertisement and answer the next five questions.

- 2. At what time does the 25 000 metres walk begin?
 - A. 5 am
 - B. 6 am
 - C. 7 am
 - D. 8 am

% Correct = 96.37



Moderately Difficult Item

Refer to the DICTIONARY section of your news sheet to answer the next 5 questions.

Di di m. pl D's or De, d'e or ds. 1, 4th litter of the frights alphabet 2, Africe 2nd note of the scale of C major

d, short furm of had or would.

6., Abbrev. 1. daughter 2. delete 3. penny, pence. [1. denarint]. 4. died. 5 dialect. 8. diameter 7. density

D. 1. Roman numeral for 500. 2. Chem Symbol deuterium.

Didit, n. detective Also, d.

DA 'di 'ci/, n Abbrev. USA District Attorney.

Attorney, debted, debbing, a Opt. 1, to touch or tap gently, esp with soft or units substance 2, to put on ta substance) with light strokes. Opt. 3, to touch lightly. On. 4, quock or light tap, as with the hand or something soft. 5 a small quantity, exp. of something most. [ARE]

[ME] debble //in/tol/r, n., -bled, -bling Or 1, to dip in A unit of a liquid, splack Ors 2, to play in water, as with the liands or feet 3, to du anything without serious interest: to ~ in literature [Flem.] or (eet 3. to un anyoning interests: (e) — in literature [Flein - dabbier, n. dabbilck //dxbifkk/, n. any of various Aust, or European grebes.

dab hand, w. Colleg. person particularly shilled (usu. fol. hy at)

de capo /da 'kapou/, adv. (musical direc-

sa capo zea kapenz, and control of the second restriction from the beginning [It.] sachshund //dxksaml, 'da/hand/, in German breed of small dog with long body & very short legs. [G Dachs badger + Hund for the same of the s

eogy //dæktil, +1/, n 1. Zool. finger or toe. 2. Paerry. font (def. 6) of 3 syllables, one long fullowed by 2 short, or in modern terse, one accented followed by 2 unac-cented, as in 'Génify énd liumánify' [AH:, from L, from Gk: finger or toel - dactylle,

6ed /dæd/, m. Colling 1. Also, deddy. father. 2. (form iif address to an older man). learlier dadde, nuisery substitute for

seda l'Asilal, n. movement in art & inter-sture Irim about 1915 to 1922, which deliberately offended by going against taditional artistie & social standards [F deda hohbyhorse, symbol of the movement] -dadalam, n. -dadalal, n.

diddy-long-legs /dixde-lim legs/, m sing å pl small spuler with long, thin legs, siren found indicates.

alten titulist intensity.

dos, doss. 1. part

of pedestal between hase & cap 2. hover

broad part of an inside wall functed in wallpaper, fabric, paint, etc [li die, cube,

221

pedestal, from L.) deemon Zilman, das-l, n t im Greek draw spitt of a place or person 2
-damon. [L. from Cik] - damonic, adj

daisy

DAF, Abbres delayed auditory feedback deffodl //thefodile, # 1. plant with yellow, belt disped flowers colour funcaplained var at Mit alfodile. from Cik asphadelas)

doft blaft, ails 1, simple or lootish 2. mad, mane. Alsu, deffy [OE gedefte mild, nicekl

deg! dieg! woul, usu, ditty, from cheep's landquarters

dag? dags, n. Colleg odd or amusing remm

deg dag , # Colloy 1, an untidy or dirty person 2, person lacking in style deggy, adj

dagger clicked, n. t. weapon with short partitled blade, like a small sword 2. Prort mark (1) used for references, etc., obeliek 3. look daggers, to look augusty or discarcingly [All.] dagger orchid. n. kunt of orchid often

forming large masses on trees in coastal literate of NSW & white Qid

logo / de quant, n. pl. gos, goes. Callago / depante) permi il fatta tace, esp an Italian, Spantard or Portuguese. Alsu, Dago. [2 Sp. Diego James] dego / degrees 4 m . Pf

dahlla /derlja , n kind of plant, native in Mexico & Central America, widely cultivated for its showy flowers. [NL; named after A Dobl, died 1789, Swedish botanist]

after A. Dohl, died 1789, Swedish notation; daily /'deticle, adj, n., pl. lies, adv. Oadj 1. deute, happening or appearing each day or each weekday. On 2. newspaper appearing each day on each weekday. I woman employed to come & do housework every day. Oadv 4. every day; day by day: She phoned the hospital --

day by day: She phoned the heightal "calling steems," adj., ther, thest, n. pl. thes. adj. 1, delicately pleasing in appearance or movement. 2, pleasing to the taste; delicious. 3, having particular tastes; fastificus. Gn 4, something pleasing to the taste; a delicacy [ME, from C)-, from E: worthiness). delinity, ade.

dairy , de neil, m., pl. dairing, adj. On. 1. place where milk & cream are kept & made into butter & cheese 2, shup or company that sells milk, butter, etc. 3, (the cows into butter & cheese 2. shop or company that sells milk, butter, etc. 3. (the cows on) a farm which is mainly devoted to the production of milk & milk products. Oads 4. relating to or made in a ~. [All des female servant + -erse -tay] ~ dairying.

dala "deiss", in raised platform at the end of a moun, for seats of hunour, speaker's desk, etc. [ME, from OF, from LL: table] delay diserve, w. pl. eles. 1, kind of plant whirse thower heads have a yellow center & white tays. 2, any similar shaped flower of different colours. 3, push up delsies, Colloq in be deal & hotted [OE directing day's eye]

For what substance is D the chemical symbol? 27.

Ans. DEUTERIUM

% Correct = 62.72





THIS ISSUE

LASTISSUE

<u> ACIENCE FICTION</u>

DEVIL ON MY BACK
Monica Hughes. 170 pages.
I can't concentrate, Tomi thought in panic. . . I can't . . .

Could they throw me out now? Could I be programmed into a slave like Grog. . .?

In ArcOne, nothing is more important than knowledge. . . failures are 'reprocessed'-their brains wrecked forever. The computer rules-no one questions. When Tomi does, he discovers the shattering truth behind the tyrannical computer system of ArcOne. This knowledge could cost him his life. . .

RRP: was \$6.95 now\$6.00

AUSTRALIAN JUNIOR FIELD GUIDES - BEETLES Eleanor Stodart, 84 pages. Some beetles are borers, but beetles aren't boring!

Far from it, in fact some beetles have the most extraordinary habits. . .

*Bombadler beetles make putrid pops
*Fireflies have flashing night lights
*Whirligig beetles swum in circles.
You'll find: how to tell beetles from
other insects: where they live - and of
course...lou more!

To help you tell a dung beetle from a diving beetle (and others) there is a full colour photograph of each beetle. Entomology has never been so much fun!

RRP. was \$8.95 now \$6.50

INFORMATIVE

124 pages
There is a dome on poars the Santa
Lucia.

SOME ALERT by Pamere Citifiers.

Annicoxed at Lav. Ware comigcing to see the captain, she said primy Now is the time to tell him all we know.

ARR: was \$5.95 new \$5.00 CLAUDIA AND THE SAD GOOD-BYE by Ann Mertin. 130 bages.

Baby-sitters Club e26

RRP: was \$4.50 now \$3.50
JACKAROO by Chynthie Veight.
284 peges.

Gwyn had heard the regents of usckaroo, the masked outsiveness who gave aid to the heldess and money to the poor. But she doesn't believe them until she finds a doesn't a mask, and a sword in an abandoned ottom. RAP! was \$6.35 new \$6.30

THE LEGACY OF LEHR
by Katherine Kurtz. 205 peges.
Older readers.

The interstellar druiser Valkyrie is in trouble. Someone or something is stilling the drew, one by one. Are the four stinister Lenn data responsible? ARD: was \$5.95 now \$4.50 PARTY LINE A Better. 166 pages Mark is nooked on the Party line. It's so easy to talk to girls when you're by sole. But something welld is going on. The girls are talking and disapplearing.

and disappearing:
ARP; was \$5.95 now \$4.50
TRUE GHOST STORIES Kenneth
Ireiand, 108 peges.
What would you do if you saw a person
appear in mont or you wask past, and
then sted hight (frough a prick was?)
\$.xteen stories of anopurrars that

actua vinaccaned agg was 33,95 now sq. wang mid your Teacher by Anday 3

Respirited with permission from Ashion Scholestic

'vovember

BABY -STITERS GLUB 927

manufacture and the second

JESSI AND THE SUPERBRAT Ann M Martin. 138 pages. Baby Sitters Club #27

A Star...here in Stoneybrook...
Wowl...and I was going to be
baby-sitting for him...
Jessi couldn't believe her luck!
What would Derek Masters be like?
Fascinating? Trendy? Brilliant?
No...just a 'regular kid' who's not very
popular at school - the boys cail him
'sooiled brat'.

ANIMAL IMN #3

PETNAPPED Virginia Vail. 108 pages. Animal Inn #8.

"I saw the notices about Miss
Rafferty's dog and Mrs Van Fleet's
cat... Several other people I spoke to
today are missing pets as well! said
Mrs Sparks.

It's beginning to look - well peculiar!
One by one, the pets in Essex are
disappearing - but that's impossible.
Perhaps they're been pethapped!
However, when Doc asks Sheniff
Welgal to investigate, the sheniff isn't
very enthusiastic - it seems missing
pets aren't high on his list of police
priorities. It' up to Val, Toby and
Miss Maggie to do the job for him!
RRP: was \$4.95 now \$4.00

Use the STAR BOOK CLUB information to complete the order form.

30 - 32. Jill Reader in Year 7A, is going to order some books through the 'Star Book Club'.

Fill in the order form for her, using ticks in the correct boxes.

She wants:

*the latest Baby-Sitters Club book

*a novel by Chynthia Voight

30. % Correct = 69.20

*a book about ghosts

31. % Correct = 35.99.

*a book to help her with a project on insects

32. % Correct = 64.17

*a story in which a computer system is the villain

STAR STUDENT FORM					
Name JILL READER Control No. of Books 5 Due back at school by 3 NOVEM THIS ISSUE STAI	Class 7A				
THIS ISSUE STAI	}				
Aust Junior Field Guides: Beetles	\$6.50				
Balyet	\$6.00				
Devil on my Back	\$6.00	1			
Flight of the White Wolf	\$4.50				
Friendship Pact	\$5.00				
Homecoming	\$6.00				
Homecoming Jessi and the Superbrat	\$3.50	1			
Looks Great!	\$6.00				
Petnapped	\$4.00				
Silent People	\$4.00				
Eyespy Magazine No. 5 1190	\$3.00				
THIS ISSUE TEENA	GE				
April Fools	\$3.50				
Bianca	\$6.00				
Empty Sleeve	\$6.00				
Friends Are Like That	\$4.00				
LAST ISSUE STA	R				
Boggle of Bunyips	\$6.00				
Bomb Alert	\$5.00				
Claudia and the Sad Goodbye	\$3.50				
I am Susannah	\$6.00				
I Want to Go Home	\$4.50				
Into the Dark	\$6.00				
My Friend Flicka	\$6.00				
Pet Makeover	\$4.00				
Phantom Tollbooth	\$6.00				
Spy Code Handbook	\$6.00				
LAST ISSUE TEEN					
Jackaroo	\$6.00	/			
Legacy of Lehr	\$6.00				
Party Line	\$4.50				
True Ghost Stories	\$3.00	1			



APPENDIX XII - READING ABC8 - ABORIGINAL SCHOOLS

A long time ago when the earth was young, three friends Goanna, Snake and Kangaroo, lived near a waterhole. But Snake was jealous. He wanted to live in Goanna's safe hole.

'Give me that hole. It's mine', said Snake.

'No', said Goanna. 'It's mine. Dig your own hole.'

'No, I want that hole', said Snake.

'Alright, you can have it', Goanna replied. He turned to Kangaroo.

'Why don't you leave this place and come with me?'

'Yes', said Kangaroo, 'I'll go with you'.

Kangaroo and Goanna left Snake. However, Goanna had put rocks in the hole during the night. Snake slid down the hole, feeling happy because he had won the territory from Goanna. Then he started to feel hard, sharp rocks. He said to himself, 'It's too hard in here. I'll leave this hole and go away'.

Kangaroo and Goanna were watching from behind a bush on high ground. When Snake went away, they went back to the hole. They were very happy as they took the rocks out of the hole. 'It's good to use your brains when you have a problem', said Kangaroo, smiling at Goanna.

Easy Item

- 1. Goanna, Snake and Kangaroo lived
 - A. in the sea.
 - B. underneath the rocks.
 - C. behind the bushes.
 - D. near a waterhole.

% Correct = 70.27

Moderately Difficult Item

- 10. The best name for this story is
 - A. How Kangaroo Helped Goanna.
 - B. How Goanna Went Away.
 - C. How Goanna Tricked Snake.
 - D. How Snake Tricked Goanna.

% Correct = 42.10



APPENDIX XIII - READING FOR DIFFERENT PURPOSES ABR7 - ABORIGINAL SCHOOLS

DJAWAL-IDI* VOLUME FIVE, NUMBER 3 NOVEMBER 1980

Illustrations by: Wilma Peters, G. Aitken and Sharon Genovese

*An Aboriginal word meaning 'Storyteller' Cover: Crab based on a traditional drawing

		CONT	CONTENTS		
RAISING M SOUTH HE		1	LOST AND FOUND	14	
GIVING A	HELPING HAND	4	YELLOW BOY	17	
LUMP AND	LEAN	6	BOILING THE BILLY	18	
a visit to	THE AIRPORT	7	LESSONS IN THE BUSH	20	
USING A R	IFLE SAFELY	8	THE EMU AND THE BUSH TURKEY	· 25 _.	
PUZZLE	•	10			
FLOODS IN ONSLOW 11		•	•		
Published by: Djawa-Idi Aboriginal Education Resources Unit 30 Ord Street West Perth, 6005. Phone (09) 322 4377		A co-operative project involving the Catholic Education Commission, the Education Department of W.A. and Mount Lawley College of Advanced Education and funded by the Department of Aboriginal Affairs.			
© 1980			ISSN 0314-7797		

Moderately Difficult Item

- 6. What page is the puzzle on?
 - A. 6
 - B. 10
 - C. 11
 - D. 25

% Correct = 63.67

Difficult Item

- 4. How long is the story 'Lump and Lean'?
 - A. 1 page
 - B. 2 pages
 - C. 3 pages
 - D. 4 pages

% Correct = 28.40



ÖÖ

APPENDIX XIV - READING ABC10 - ABORIGINAL SCHOOLS

LEARNING ABOUT LEECHES

When I was a little boy about ten years old my father would often take me hunting and fishing in his bark canoe. Whenever we arrived at a likely place he left me sitting in the canoe while he waded through the marshes looking for wild game.

One day while looking for geese, father told me to climb a tree and wait for him otherwise the leeches would eat me. At that time I did not believe him so I went to swim after him in the water. When father saw this he came towards me and said 'Look at yourself, Mirritji!'. It was then I noticed all the leeches hanging from my body. I started to cry and tried to pull the beasts off. Whenever I took one off a lot of blood came out of the wound. I looked to my father for help. Then I saw many more leeches hanging from his body because he had to go into the water to help me.

Father quickly took some leaves and paperback and made a fire. He told me to stand in the smoke and while I was doing this I saw the leeches drop from my body one by one. At first father did the same but then he remembered the bark canoe so he had to go into the water again to retrieve it. When he came back he stood in the smoke for a second time.

Afterwards we went back to the canoe to go home. My father had made a platform of branches and leaves to cover the goose eggs so that I could sit on them without breaking them. But I was feeling too sorry for myself to ride home in the canoe. However, I had learnt yet another lesson.

Easy Item

- 4. On this day, Mirritji's father was hunting for
 - A. emu.
 - B. geese.
 - C. wallaby.
 - D. goanna.

% Correct = 63.21

Difficult Item

- 10. Put these events in the right order
 - A. The leeches dropped off Mirritji
 - B. Mirritji stood in the smoke
 - C. Leeches got on Mirritji

First...C...Second....B....Third...A

% Correct = 30.11



APPENDIX XV - READING FOR DIFFERENT PURPOSES ABR16-ABORIGINAL SCHOOLS



PAPWNYA



EXCURSION TIMETABLE

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	7:00 am - breakfast at Kormilda	ALL DAY TRIP	ALL DAY TRIP	7:00 am - Bus from Kormikla to Darwin Airport
8:00 am - Leave Papunye on Ansett Treilways	8:00 am - Bus to City for Shopping	то 	OT .	8:00 am - Leave Darwin - Flight 63 Australian Airlines
•		KAKADU	MANDORAH	
12:00 - Arrive at Alice Springs Airport		NATIONAL PARK	OΝ	12:00 - Arrive at Alice Springs
1:00 pm - Leave for	1:00 pm - Return to		THE FERRY	1:00 pm - Leave for
Darwin - Flight 39 Australian Airlines	Kormilda	• • • • • •	• ;• • •	Papunya on Anseil Trailways
	Games Alternoon	RETURN	RETURN	
5:00 pm - Arrive in Danwin. Bus to Kormilda		то	то	5:00 pm - Arrive Papunya
6:20 pm - Dinner at Kormilda	6:00 pm Dinner at Kormilda	KORMILDA	KORMILDA	
	7:00 pm - Bus to Baskelball Courts			

Moderately Difficult Item

- 4. Where do the children sleep in Darwin?
 - A. At Mandorah.
 - B. At Kakadu.
 - C. At Papunya.
 - D. At Kormilda.

% Correct = 62.59

Difficult Item

- 2. How long does the Ansett Trailways bus take to get from Alice Springs to Papunya?
 - A. 7:00 am 1:00 pm
 - B. 12:00 noon 5:00 pm
 - C. 1:00 pm 5:00 pm
 - D. 6:00 pm 7:00 pm

% Correct = 30.87

BIBLIOGRAPHY

- American Psychological Association, 1985, Standards for Educational and Psychological Testing, American Psychological Association, Washington, DC.
- Ebel, RL & Frisbie, DA 1986, Essentials of Educational Measurement, 4th ed, Prentice-Hall, Englewood Cliffs, New Jersey.
- Educational Testing Service 1973, Multiple Choice Questions: A Close Look, Test Development Division, Educational Testing Service, Princeton, New Jersey.
- Gronlund, NE 1985, Measurement and Evaluation in Teaching, 5th ed, Macmillan, New York.
- Gronlund, NE 1988, How to Construct Achievement Tests. 4th ed. Prentice-Hall, Englewood Cliffs, Nev Jersey.
- Huang, ZS 1990, Results of the Primary Assessment Program 1989, Northern Territory Department of Education, Darwin.
- Huang, ZS 1989, Report on Student Performance in the NT Primary Assessment Program for Aboriginal Schools: 1988. Northern Territory Department of Education, Darwin.
- Izard, JF 1977, Construction and Analysis of Classroom Tests, Australian Council for Educational Research, Melbourne.
- Masters, G et al, 1990, Profiles of Learning. The Basic Skills Testing Program in New South Wales: 1989, Australian Council for Educational Research, Melbourne.
- Popham, WJ 1981, Modern Educational Measurement, Prentice-Hall, Englewood Cliffs, New Jersey.
- Spearritt, D (ed) 1982, The Improvement of Measurement in Education and Psychology. Contributions of Latent Trait Theories. Australian Council for Educational Research, Melbourne.

